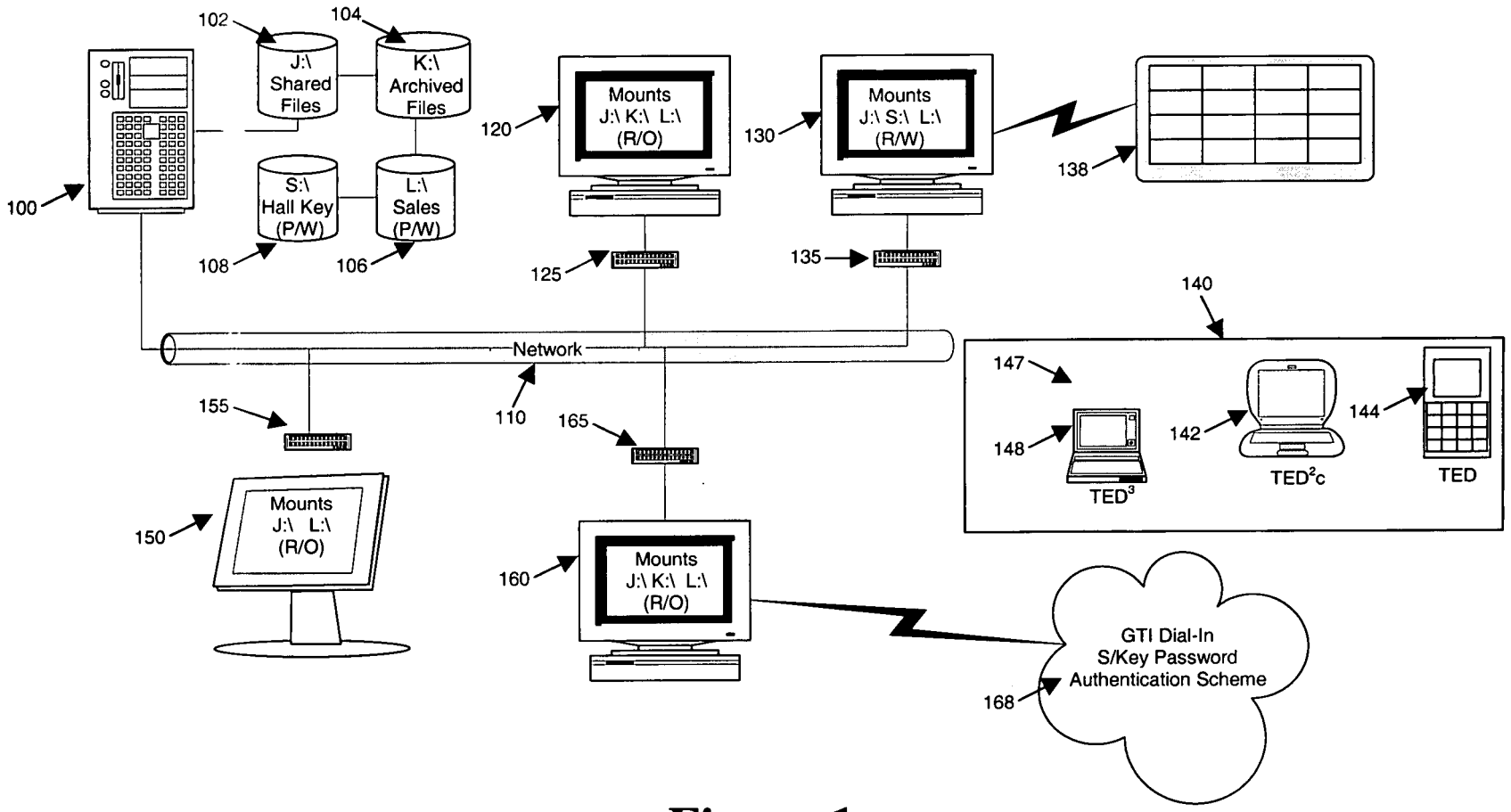

102
104
J:\ Shared Files
K:\ Archived Files
S:\ Hall Key (P/W)
L:\ Sales (P/W)
100
108
106
120
Mounts J:\ K:\ L:\ (R/O)
125
130
Mounts J:\ S:\ L:\ (R/W)
135
138
140
Network
110
147
148
TED3
142
TED2c
144
TED
155
165
150
Mounts J:\ L:\ (R/O)
160
Mounts J:\ K:\ L:\ (R/O)
GTI Dial-In S/Key Password Authentication Scheme
168

Figure 1

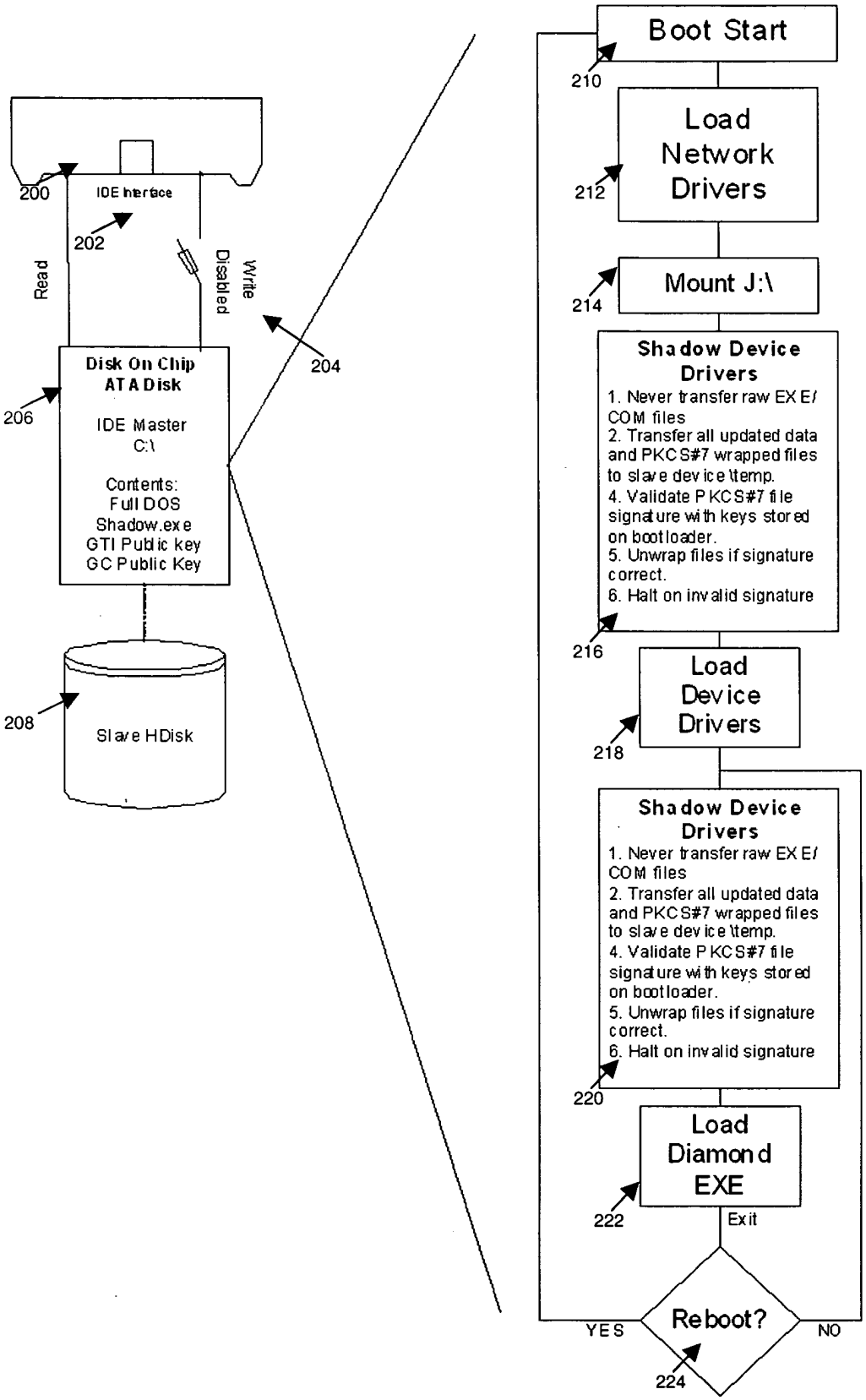

200
IDE Interface
202
Read
Write
Disabled
204
Disk On Chip
ATA Disk
IDE Master
C:\
Contents:
Full DOS
Shadow.exe
GTI Public key
GC Public Key
206
208
Slave HDisk
Boot Start
210
Load
Network
Drivers
212
Mount J:\
214
Shadow Device
Drivers
1. Never transfer raw EXE/
COM files
2. Transfer all updated data
and PKCS#7 wrapped files
to slave device \temp.
4. Validate PKCS#7 file
signature with keys stored
on bootloader.
5. Unwrap files if signature
correct.
6. Halt on invalid signature
216
Load
Device
Drivers
218
Shadow Device
Drivers
1. Never transfer raw EXE/
COM files
2. Transfer all updated data
and PKCS#7 wrapped files
to slave device \temp.
4. Validate PKCS#7 file
signature with keys stored
on bootloader.
5. Unwrap files if signature
correct.
6. Halt on invalid signature
220
Load
Diamond
EXE
222
Exit
Reboot?
YES
NO
224

Figure 2

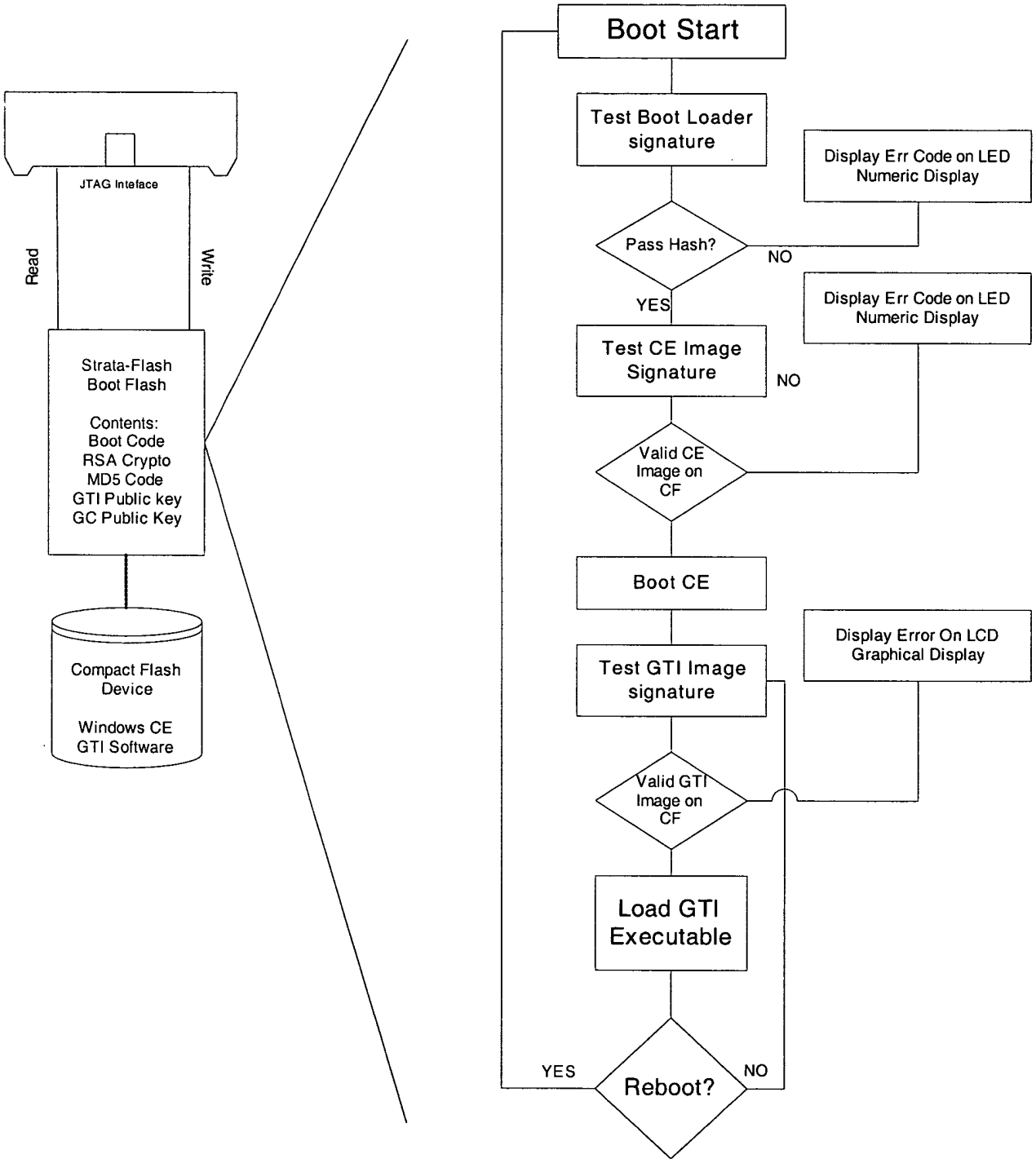

JTAG Inteface
Read
Write
Strata-Flash
Boot Flash
Contents:
Boot Code
RSA Crypto
MD5 Code
GTI Public key
GC Public Key
Compact Flash
Device
Windows CE
GTI Software
Boot Start
Test Boot Loader signature
Display Err Code on LED Numeric Display
Pass Hash?
NO
YES
Display Err Code on LED Numeric Display
Test CE Image Signature
NO
Valid CE Image on CF
Boot CE
Display Error On LCD Graphical Display
Test GTI Image signature
Valid GTI Image on CF
Load GTI Executable
YES
Reboot?
NO

Figure 3

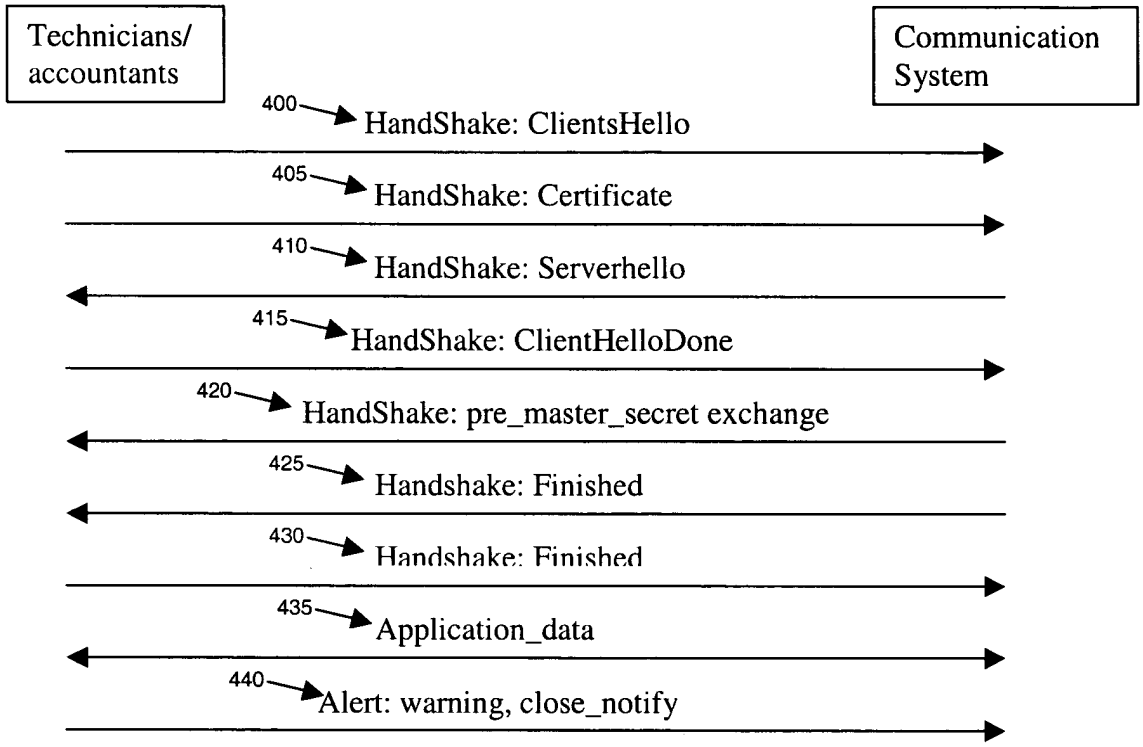

Technicians/ accountants
Communication System
400
HandShake: ClientsHello
405
HandShake: Certificate
410
HandShake: Serverhello
415
HandShake: ClientHelloDone
420
HandShake: pre_master_secret exchange
425
Handshake: Finished
430
Handshake: Finished
435
Application_data
440
Alert: warning, close_notify

Figure 4

BEST AVAILABLE COPY

Figure 5

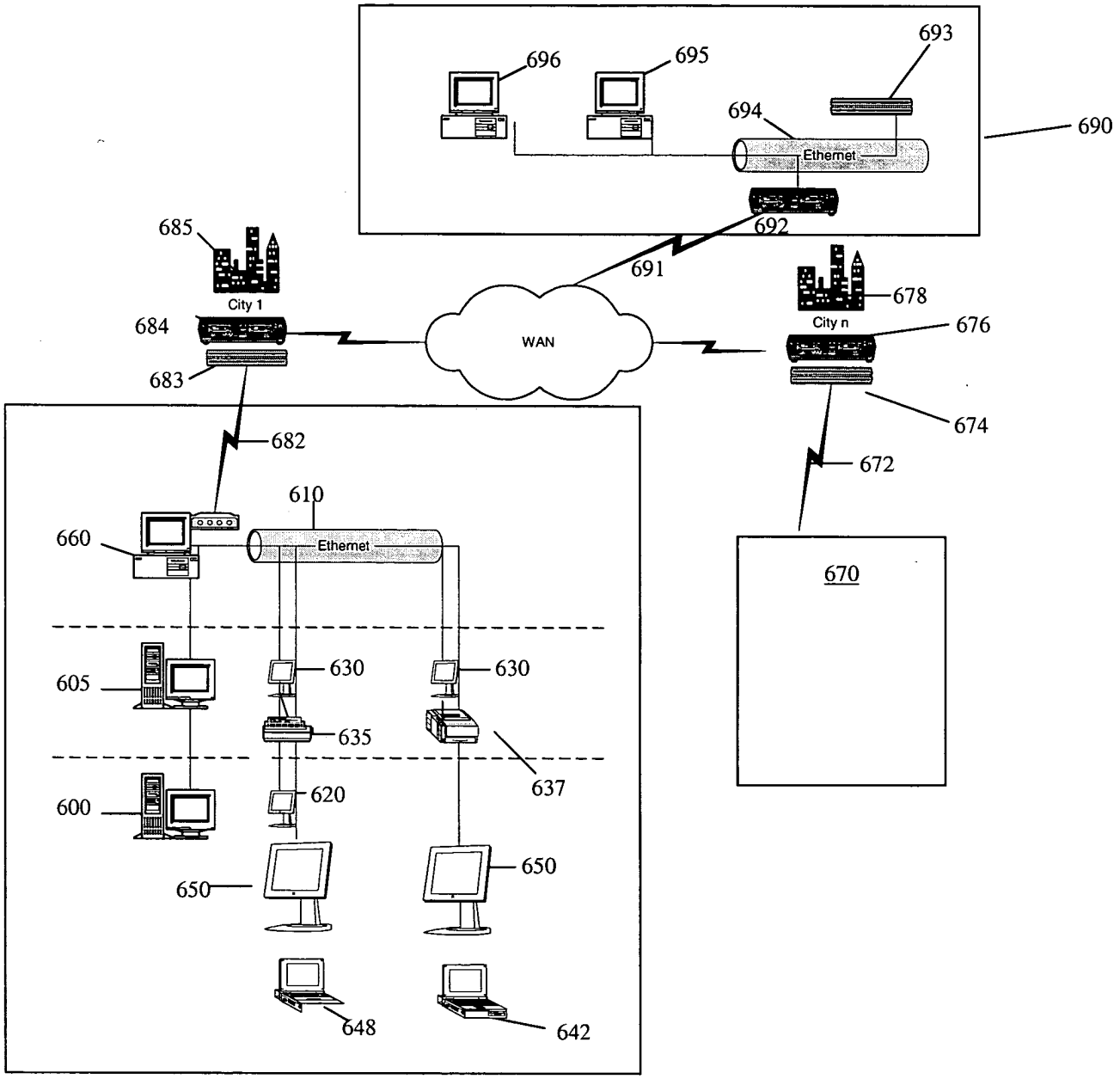


Figure 6

BEST AVAILABLE COPY

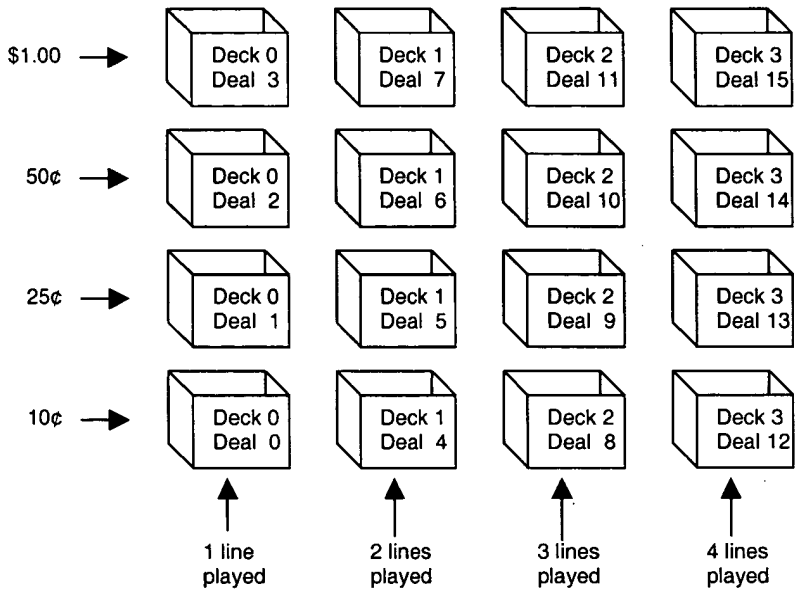


Figure 7

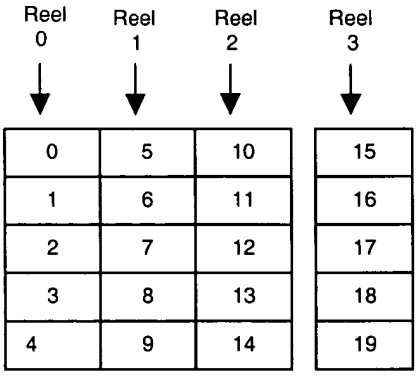


Figure 8

Symbol(s)	Symbol ID
Seven / Race 0	0
Horse Shoe / Race 1	1
Bell / Race 2	2
Watermelon / Race 3	3
Orange / Race 4	4
Plum / Race 5	5
Biplane	6

Figure 9

GetSymbol(0,index[0])	GetSymbol(1,index[1]+2)	Etc.
GetSymbol(0,index[0]+1)	GetSymbol(1,index[1]+2)	Etc.
GetSymbol(0,index[0]+2)	GetSymbol(1,index[1]+2)	Etc.
Etc.	etc.	

Figure 10

GetSymbol(0,19)	GetSymbol(1,22)	GetSymbol(2,5)	GetSymbol(3,5)
GetSymbol(0,20)	GetSymbol(1,23)	GetSymbol(2,6)	GetSymbol(3,0)
GetSymbol(0,21)	GetSymbol(1,24)	GetSymbol(2,7)	GetSymbol(3,1)
GetSymbol(0,22)	GetSymbol(1,25)	GetSymbol(2,8)	GetSymbol(3,2)
GetSymbol(0,23)	GetSymbol(1,26)	GetSymbol(2,9)	GetSymbol(3,3)

Figure 11

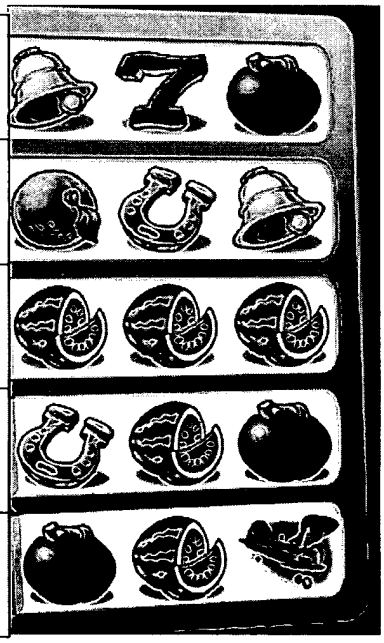
2	0	5	5	
4	1	2	0	
3	3	3	1	
1	3	5	2	
5	3	6	3	

Figure 12

BEST AVAILABLE COPY

Win #	Winning Combination				NumCells	Packed Win #	Award	Bonus
0	Seven	Seven	Seven	-	3	0	100	0
1	Horse Shoe	Horse Shoe	Horse Shoe	-	3	57	50	0
2	Bell	Bell	Bell	-	3	114	25	0
3	Watermelon	Watermelon	Watermelon	-	3	171	10	0
4	Orange	Orange	Orange	-	3	228	5	0
5	Plum	Plum	Plum	-	3	285	1	0
6	Seven	Seven	Biplane	Race 0	4	42	100	10
7	Horse Shoe	Horse Shoe	Biplane	Race 1	4	435	50	10
8	Bell	Bell	Biplane	Race 2	4	828	25	10
9	Watermelon	Watermelon	Biplane	Race 3	4	1221	10	10
10	Orange	Orange	Biplane	Race 4	4	1614	5	10
11	Plum	Plum	Biplane	Race 5	4	2007	1	10
12	Seven	Seven	Biplane	Race 5	4	47	100	5
13	Horse Shoe	Horse Shoe	Biplane	Race 3	4	437	50	5
14	Bell	Bell	Biplane	Race 4	4	830	25	5
15	Watermelon	Watermelon	Biplane	Race 1	4	1219	10	5
16	Orange	Orange	Biplane	Race 2	4	1612	5	5
17	Plum	Plum	Biplane	Race 0	4	2002	1	5
18	Seven	Seven	Biplane	Race 1	4	43	100	2
19	Horse Shoe	Horse Shoe	Biplane	Race 2	4	436	50	2
20	Bell	Bell	Biplane	Race 0	4	826	25	2
21	Watermelon	Watermelon	Biplane	Race 4	4	1222	10	2
22	Orange	Orange	Biplane	Race 5	4	1615	5	2
23	Plum	Plum	Biplane	Race 3	4	2005	1	2
24	Seven	Seven	Biplane	-	3	6	100	1
25	Horse Shoe	Horse Shoe	Biplane	-	3	62	50	1
26	Bell	Bell	Biplane	-	3	118	25	1
27	Watermelon	Watermelon	Biplane	-	3	174	10	1
28	Orange	Orange	Biplane	-	3	230	5	1
29	Plum	Plum	Biplane	-	3	286	1	1
30	-	-	-	-	0	0	0	0

Figure 13

	Payline[0]	Payline[1]	Payline[2]	Payline[3]	Payline[4]
Pack dLine[0]	0	0	0	0	0
PackedLine[1]	2	4	3	1	5
PackedLine[2]	14	29	24	10	38
PackedLine[3]	103	205	171	75	272
PackedLine[4]	726	1441	1197	526	1906

Figure 14

	REEL 1		REEL 2		REEL 3		REEL 4	
INDEX	SYMBOL	ID	SYMBOL	ID	SYMBOL	ID	SYMBOL	ID
0	Orange	4	Bell	2	Orange	4	Race 0	0
1	Watermelon	3	Plum	5	Horseshoe	1	Race 1	1
2	Horseshoe	1	Orange	4	Plum	5	Race 2	2
3	Plum	5	Horseshoe	1	Plum	5	Race 3	3
4	Watermelon	3	Plum	5	Plum	6	Race 4	4
5	Plum	5	Horseshoe	1	Plum	5	Race 5	5
6	Bell	2	Bell	2	Bell	2		
7	Orange	4	Seven	0	Watermelon	3		
8	Plum	5	Watermelon	3	Plum	5		
9	Seven	0	Orange	4	Plane	6		
10	Orange	4	Horseshoe	1	Bell	2		
11	Seven	0	Orange	4	Seven	0		
12	Watermelon	3	Plum	5	Orange	4		
13	Plum	5	Orange	4	Watermelon	3		
14	Horseshoe	1	Horseshoe	1	Plum	6		
15	Seven	0	Watermelon	3	Watermelon	3		
16	Seven	0	Bell	2	Seven	0		
17	Watermelon	3	Watermelon	3	Bell	2		
18	Bell	2	Seven	0	Plum	5		
19	Bell	2	Watermelon	3	Plum	6		
20	Orange	4	Plum	5	Bell	2		
21	Watermelon	3	Seven	0	Seven	0		
22	Horseshoe	1	Seven	0	Horseshoe	1		
23	Plum	5	Horseshoe	1	Bell	2		
24	Horseshoe	1	Watermelon	3	Plum	6		
25	Orange	4	Watermelon	3	Watermelon	3		
26	Seven	0	Watermelon	3	Watermelon	3		
27	Bell	2	Seven	0	Orange	4		
28	Watermelon	3	Horseshoe	1	Seven	0		
29	Horseshoe	1	Plum	5	Plum	6		

Figure 15

Symbol(s)	Symbol ID
Seven / Race 0	0
Horse Shoe / Race 1	1
Bell / Race 2	2
Watermelon / Race 3	3
Orange / Race 4	4
Plum / Race 5	5
Biplane	6

Figure 16

Multiplier	Modulus	Modulus as a Power of 2
13821	32768	2^15
47485	65536	2^16
82669	131072	2^17
160461	262144	2^18
217293	524288	2^19
387645	1048576	2^20
886269	2097152	2^21
2067221	4194304	2^22
3513381	8388608	2^23
12268885	16777216	2^24
21149085	33554432	2^25
41430805	67108864	2^26
96801245	134217728	2^27
169764749	268435456	2^28
338335805	536870912	2^29
777138309	1073741824	2^30
906185749	2147483648	2^31
3039177861*	4294967296*	2^32*
6223592213	8589934592	2^33
10618587253	17179869184	2^34
21733031525	34359738368	2^35
12132445	68719476736	2^36
33531852193	137438953472	2^37
85136592465	274877906944	2^38
481296297737	549755813888	2^39
330169576829	1099511627776	2^40
386564843009	2199023255552	2^41
3485675500289	4398046511104	2^42
812661373313	8796093022208	2^43
17007948002497	17592186044416	2^44
1561091795041	35184372088832	2^45
44485709377909	70368744177664	2^46
34155093825977	140737488355328	2^47
67884336772053	281474976710656	2^48

Figure 17

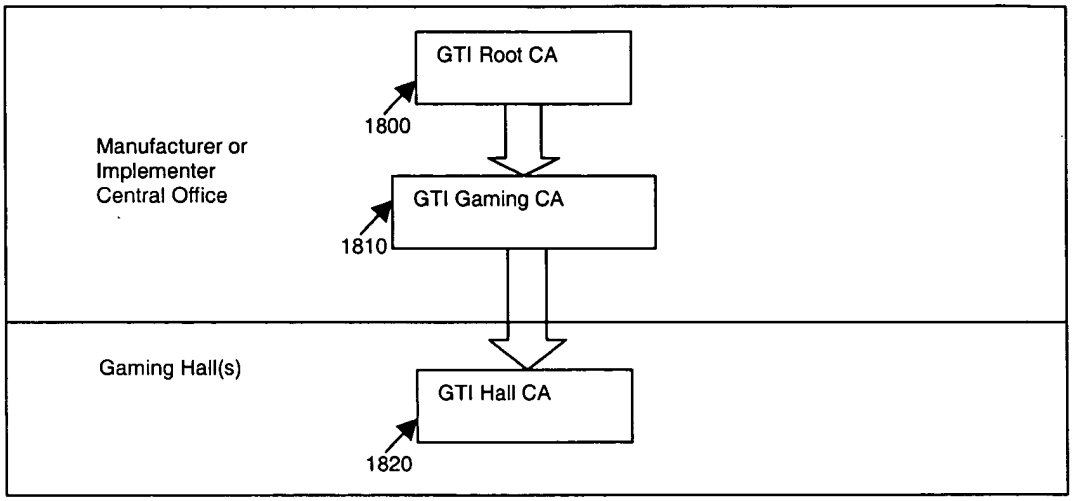


Figure 18

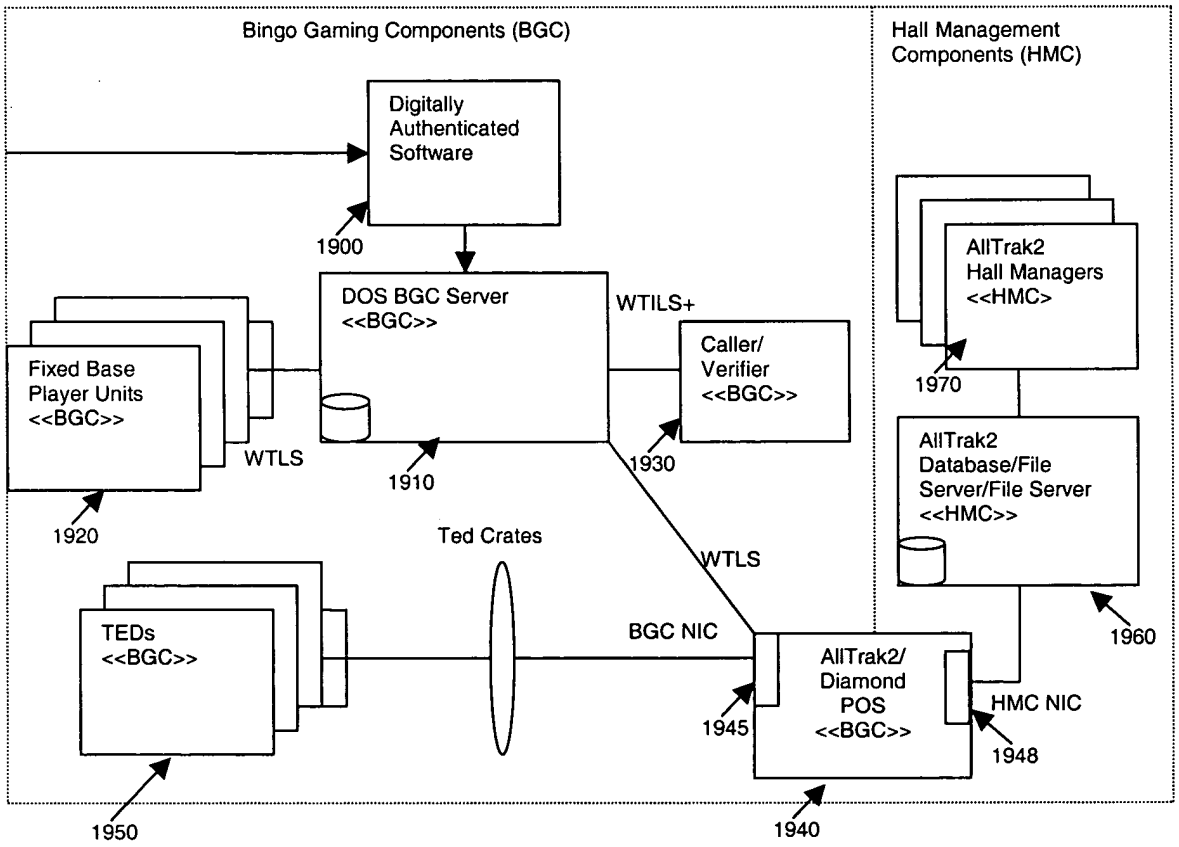


Figure 19

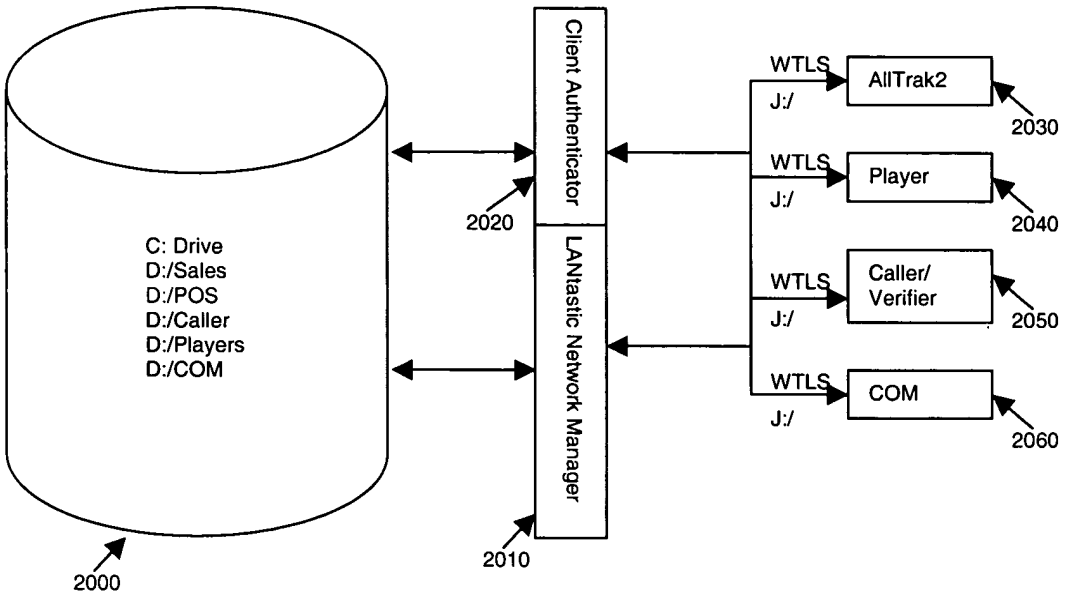


Figure 20

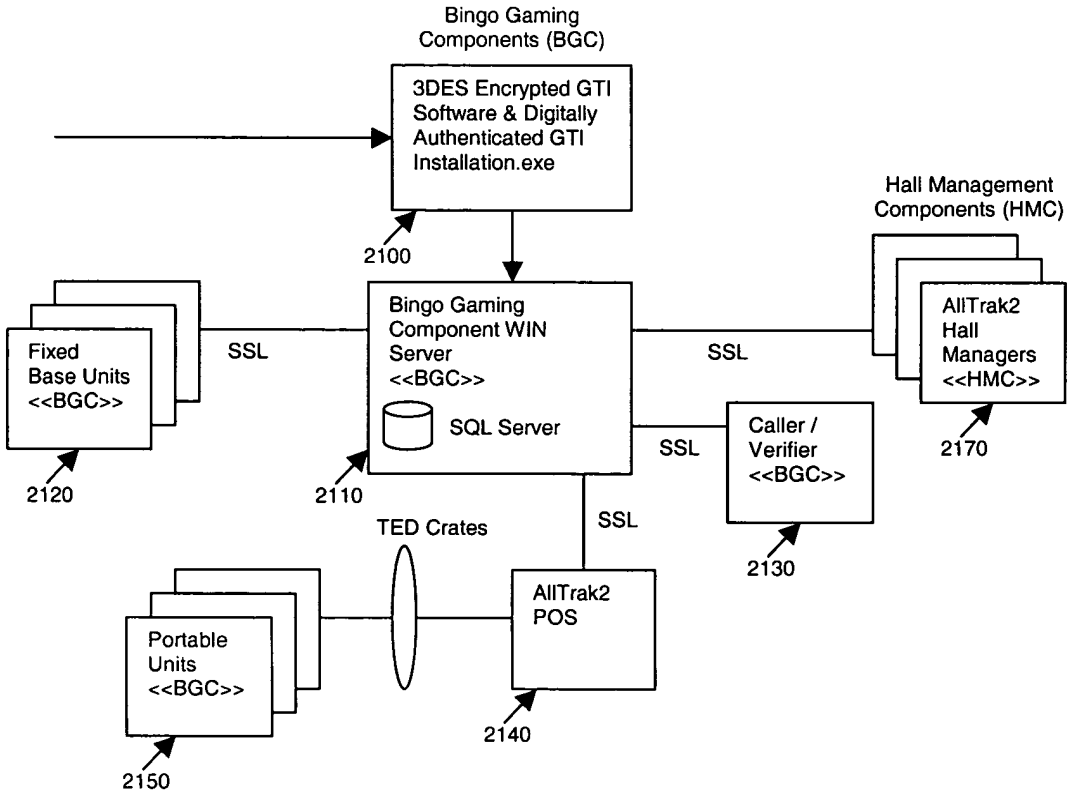


Figure 21

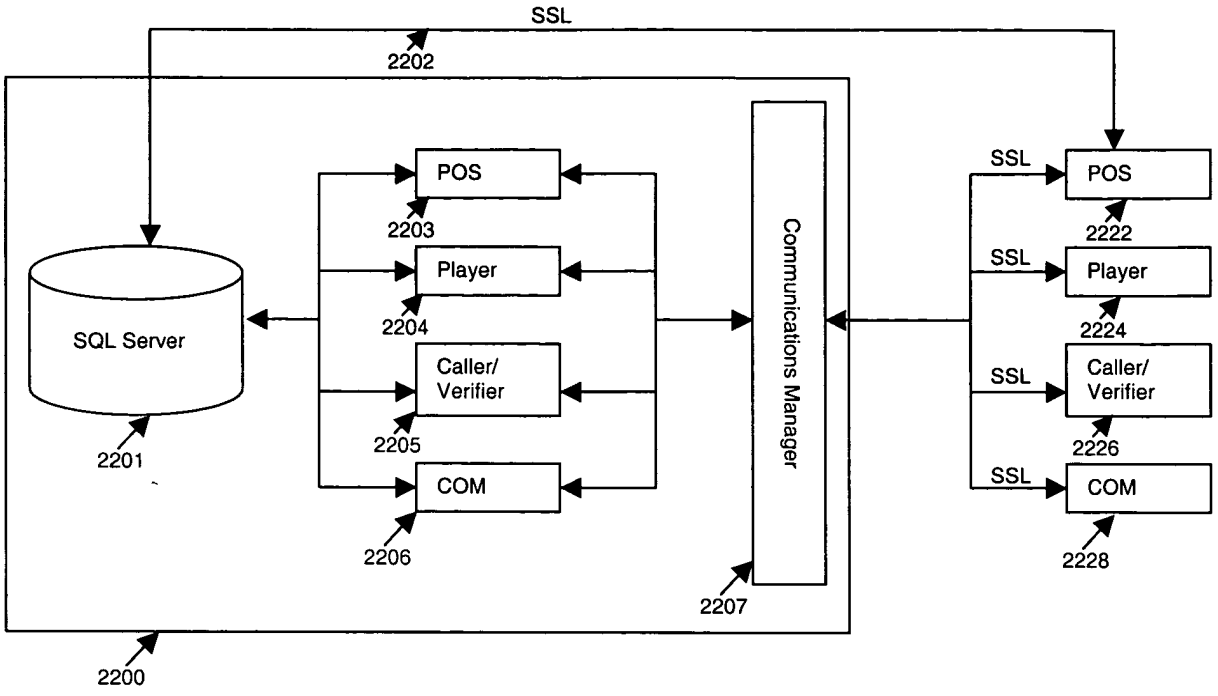


Figure 22

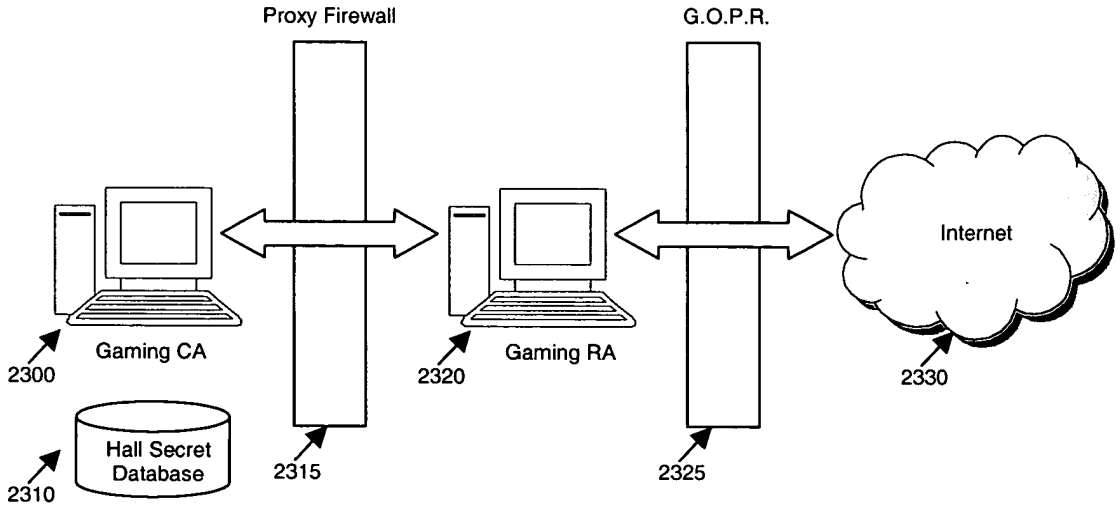


Figure 23

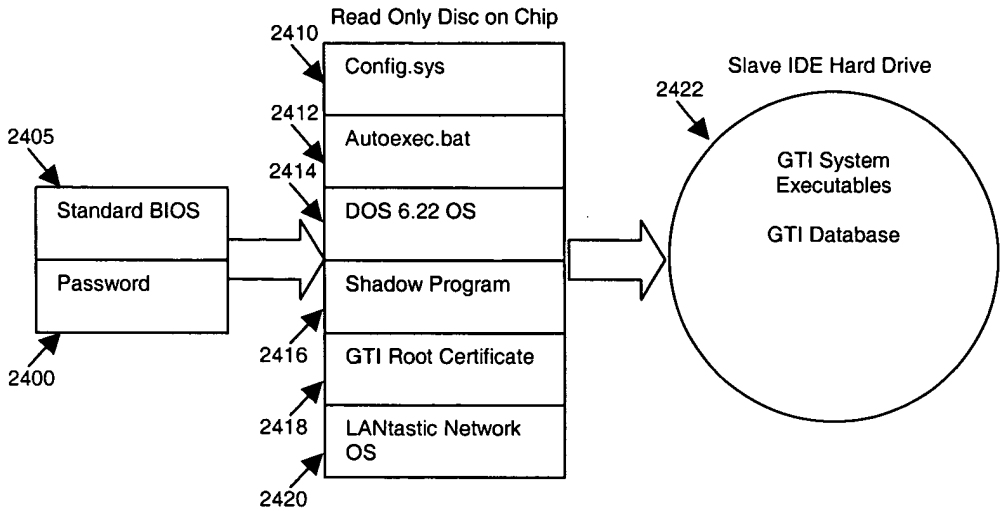


Figure 24

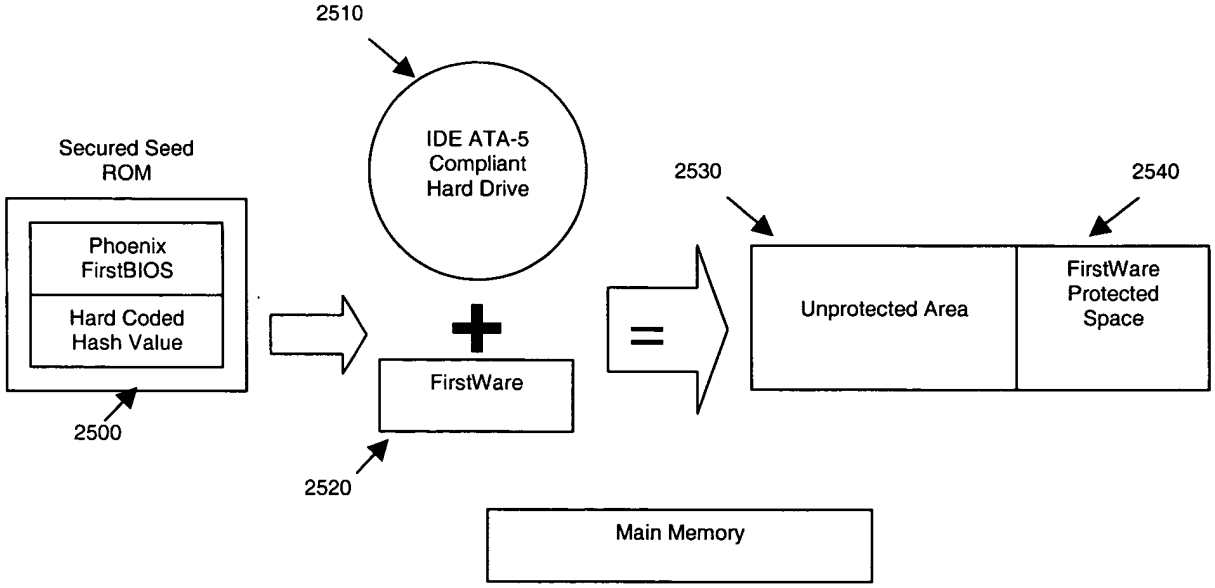


Figure 25

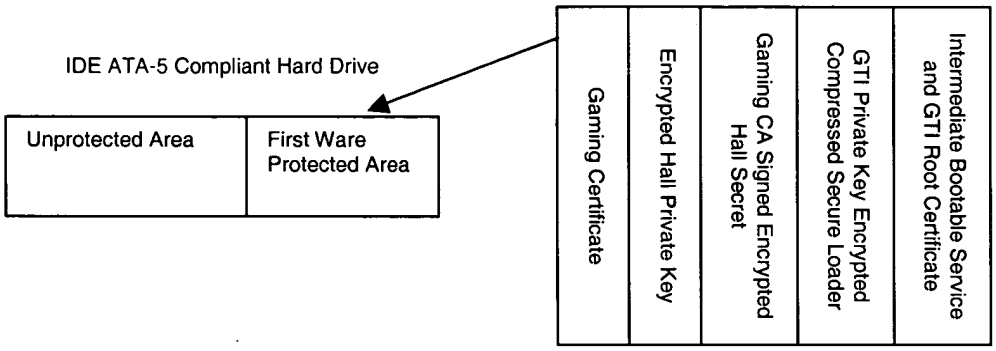

IDE ATA-5 Compliant Hard Drive
Unprotected Area
First Ware Protected Area
Gaming Certificate
Encrypted Hall Private Key
Gaming CA Signed Encrypted Hall Secret
GTI Private Key Encrypted Compressed Secure Loader
Intermediate Bootable Service and GTI Root Certificate

Figure 26

Platforms	Authenticate Executables	Authentic at n Network	Network Access	Netw rk Messag Security	Database Security	Audit	User Access	Installation
DOS POS	Boot loader	Network Login using Hall Secret	Based on network login access	Broadcast Packet Signed with Session Secret	Rows signed with private key	None	None	When application loads, prompts for certificate request if cannot login
Master	Boot loader	N/A	N/A	N/A	N/A	Keystroke Monitor	Console / Network	Generates Hall Secret, Hall private/public key, Request certificate from Gaming CA
Caller (if separate)	Boot loader	Network Login using Hall Secret	Based on network login access	Broadcast Packet Signed with Session Secret	Rows signed with private key	None	None	When application loads, prompts for Certificate Request if cannot login
COM	Boot loader	Network Login using Hall Secret	Based on network login access	N/A	N/A	None	Dial In	When application loads, prompts for Certificate Request if cannot login
Player	Boot loader	Network Login using Hall Secret	Based on network login access	Broadcast Packet Signed with Session Secret	Rows signed with private key	None	None	When application loads, prompts for Certificate Request if cannot login
Windows POS	Windows Software Installation Control	Network Login using Hall Secret	Based on network login access	N/A	Rows signed with private key	None	None	When application loads, prompts for Certificate Request if cannot login
TED	Subsection Testing	Negotiates Session Secret using Hall Secret at POS	N/A	Signed Data with Session Secret	N/A	None	None	N/A
TED^{2}C	Boot loader	Negotiates Session Secret using Hall Secret at POS	N/A	Signed Data with Session Secret	N/A	None	None	When application loads, prompts for Certificate Request if cannot login
Traveler	Boot loader	Negotiates Session Secret using Hall Secret at POS	N/A	Signed Data with Session Secret	N/A	None	None	When application loads, prompts for certificate requests if cannot login
Remote Crate	Boot loader	Network Login using Hall Secret	Based on network login access	Packet Signed with Session Secret	Rows signed with private key	None	None	When application loads, prompts for certificate requests if cannot login
Non-Gaming	None	Not Authorized	Access not allowed	No Messages Sent	Does not access Gaming Database	None	Unsec.	No special action

Figure 27